

TRANSMITTAL OF APPEAL BRIEF (Small Entity)Docket No.
94-042 CIP/CIPIn Re Application Of: **Thomas C. Rolle**Serial No.
09/550,813Filing Date
April 18, 2000Examiner
Morgan, Eileen P.Group Art Unit
3723Invention: **METHOD AND COMPOSITION FOR REMOVING COATINGS WHICH CONTAIN HAZARDOUS ELEMENTS****TO THE COMMISSIONER FOR PATENTS:**

Transmitted herewith in triplicate is the Appeal Brief in this application, with respect to the Notice of Appeal filed on:

February 13, 2004

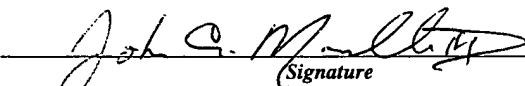
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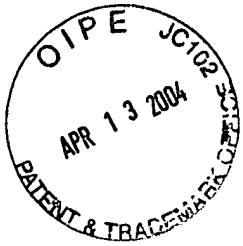
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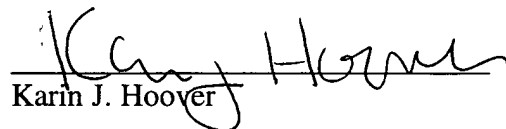
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PATENT TRADEMARK OFFICE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Application of:

Thomas C. Rolle

Serial No. 09/550,813

Filed: April 18, 2000

Art Unit: 3723

Patent Examiner: Morgan, Eileen P.

Our Ref: 94-042 CIP/CIP

METHOD AND COMPOSITION
FOR REMOVING COATINGS
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APPEAL BRIEF

Appellants respectfully submit the following Appeal Brief to appeal the Final Office Action of November 18, 2003 which finally rejected claims 4-15 of the above-referenced application. The Appellants timely filed a Notice of Appeal on February 13, 2004.

I. Real Party in Interest

The real party and interest is Nextec, Inc. of Dubuque, Iowa. Nextec, Inc. is the assignee of the above-referenced patent application.

II. Related Appeals and Interferences

There are no related appeals or interferences related to this application.

III. Status of Claims

Claims 1 and 2 of the present application have been withdrawn from consideration as a result of a restriction requirement imposed by the Examiner. Claim 3 has been canceled. The remaining claims 4-15 are presently pending in the application and are the subject of this appeal.

IV. Status of Amendments

The Appellants did not file any amendment subsequent to the November 18, 2003 Final Office Action. The Appellants only filed their Notice of Appeal, which as mentioned above, was timely filed on February 13, 2004. Therefore, to the best of Appellants' knowledge, all previous amendments presented in the case have been entered.

V. Summary of the Invention

The claims of the present invention that are subject of this Appeal relate to a composition for removing coatings, said coatings having a hazardous metal or compound contained therein.

See Specification, page 1, Field of Invention.

It is well known that coatings used on metals and nonmetals often contain various hazardous and toxic substances. When these coatings are removed or begin to fall off, the offending hazardous and toxic substances create a risk to the environment. *See Specification, page 1, Background of Invention.* This danger is present especially during abrasive, mechanical,

and chemical removal of paint coatings, such as the sandblasting of lead-based paint on steel structures. The United States Environmental Protection Agency has included many of the ingredients of coatings, such as heavy metals, as hazardous substances. These heavy metal wastes include chromium, silver, lead, arsenic, barium, cadmium, selenium, mercury, zinc, and others as well as polyvinyl chloride, PCB, BHC and like toxins. *See Specification, page 2, Background of Invention.* In many of the known removal processes, the hazardous substances create troublesome disposal and handling problems. The conventional techniques to handle the hazardous byproducts are expensive. *See Specification, pages 2-3, Background of Invention.*

The present invention addresses the above problems by providing compositions to remove hazardous coatings. The claimed compositions facilitate the handling and disposal of such in a manner that renders it exempt from regulation and that is both cost effective and practical to use. The compositions of the present invention comprise at least one compound selected from the group of alkaline metals or alkaline earth metals or Portland cement and/or phosphates, sulfates, silicates, oxides, or hydroxides of alkaline metals or alkaline earth metals. The materials can be used alone or in combination with each other as well as solvents, resins or surfactants. The preferred compounds are listed on pages 7-8 of the specification. Preferred solvents, which include aliphatic and aromatic hydrocarbons, are referenced on page 8 of the specification. In several embodiments, the invention teaches a preferred amount of solvent and a preferred ratio of the various compounds to one another and the solvent, as disclosed in Examples V-VIII of the specification.

VI. Issues

The Appellants present the following issues:

- A. Should United States Patent to Broom et al. United States Patent No. 6,037,469 ("Broom et al.") be disqualified as prior art under 35 U.S.C. 102(e)?
- B. If Broom et al. can properly be applied as a reference under 35 U.S.C. 102(e) to support an obviousness rejection, should Broom et al. be deemed nonanalogous art and thus disqualified as prior art?
- C. If Broom et al. is analogous art, does Broom et al. fail to support a rejection under 35 U.S.C. 103(a) in that Broom et al. does not motivate the skilled artisan to arrive at the claimed composition with any reasonable expectation of success?

The Appellants answer each of the above in the affirmative.

VII. Grouping of Claims

The Examiner has rejected claims 4-15 as allegedly unpatentable over Broom et al. alone. The claims in this group do not stand or fall together.

VIII. Argument

This application has languished in the patent office for four years. Outside of the two Restriction Requirements (the first of which was retracted and superceded by the second restriction causing significant delay), the delay can be attributed to one prior art reference: Broom et al. and the Examiner's failure to address Appellants' arguments as to why Broom et al. does not qualify as prior art.

A. The Broom et al. Reference

Broom et al., filed in the United States on May 24, 1995, is a patent entitled 6 – (Substituted Methylene) Penems and Intermediates. The patent is assigned to the pharmaceutical company, SmithKline Beecham PLC. Broom et al. is a continuation of U.S. Application No. 08/428,101, which was filed as Application No. PCT/EP93/02894 on October 20, 1993 and which ultimately issued as U.S. Patent No. 5,602,250 (“the ‘250 patent”). The ‘250 patent satisfied the requirements of 35 U.S.C. 371(c)(1), (2), and (4) on April 28, 1995 as indicated on the front page of the patent itself. *See Attachment B to Appellants’ Amendment and Remarks to the Office Action of June 6, 2003 filed on September 3, 2003.*

Broom et al. is directed toward pharmaceutical compounds “having β -lactamase inhibitory and antibacterial properties.” *See Broom et al., Col. 1, l. 9.* As mentioned, Broom et al. were concerned with creating a pharmaceutically acceptable compound; this is evidenced at various points throughout the specification of Broom et al.’s patent. *See Col. 3, l. 18, 24-25, 49; Col. 4, l. 47.* Broom et al. further disclose, when discussing pharmaceutically acceptable attributes of the invention, that other such attributes “would be apparent to those skilled in the art.” *See Col. 3, l. 23-25.* Apparently then, those skilled in the art according to Broom et al. are individuals in the mid 1990's with skill and knowledge in the pharmaceutical field, and in particular, would have knowledge regarding the pharmacological effects of organic chemicals.

The claimed invention, however, relates to a composition for removing coatings, said coatings having a hazardous metal or compound contained therein. *See Specification, page 1, Field of Invention.* The presently claimed invention addresses the problems in the prior art of removing coatings, said coatings having a hazardous compound contained therein, e.g., paint on

a steel bridge, the paint containing a hazardous material, which renders removal difficult and hazardous to the environment. The presently claimed compositions facilitate the handling and disposal of any waste in a manner that renders it exempt from regulation.

B. The Appellants' Arguments With Respect To Broom et al. Have Not Been Adequately Addressed

The Appellants present three issues to the board, two of which, i.e., whether Broom et al. qualifies as prior art under 35 U.S.C. 102(e) and whether Broom et al. is analogous prior art, were previously presented to the Examiner. But the Examiner either entirely ignored or inadequately addressed Appellants' arguments. For example, the Examiner clearly never addressed Appellants' argument with respect to Broom et al. not qualifying as a reference under 35 U.S.C. 102(e), and the Examiner provided a one sentence response to the Appellants' argument that Broom et al. is nonanalogous art. Respectfully, the Examiner's failure to articulate the reasons for its rejection is in contravention to the Administrative Procedure Act, 5 U.S.C. § 706(2). *See In Re Sang Su Lee* 277 F.3d 1338, 1342-44 (Fed. Cir. 2002)(stating that the Patent Office must articulate its reasons for a rejection and that the Patent Office must provide an administrative record showing the evidence supporting a rejection accompanied by the reasoning supporting the rejection.) While ignoring Appellants' arguments with respect to Broom et al. qualifying as prior art, the Examiner has seized on the preamble of the claim, which recites a "use", and has five times reiterated the following statement (or something similar thereto) to sustain her rejection:

The use of a material, if it is added into something does not further limit the claim. This is intended use. The preamble is clearly claiming a treatment material, not a combination of material and some other composition. In regards to the other claims, the intended use of the treatment material "in a method for removing a coating" does not further limit the claim structurally..."

While the Appellants do not agree with this sentiment regarding preambles that recite an intended use, the Appellants respectfully submit that the preambles of the claims have not been the focus of their arguments. The Appellants have submitted other arguments that have nothing to do with "intended use" as to why the rejections cannot be sustained, but the Appellants have been unsuccessful in focusing the Examiner on anything but her "intended use" reasoning. This is regrettable since the Appellants strongly submit that their arguments with respect to Broom et al. not qualifying as prior art are worthy of consideration.

Accordingly, the Appellants have been forced to appeal in order to have the Board consider its arguments that Broom et al. cannot qualify as anticipating prior art to support a rejection of Claim 15 under 35 U.S.C. 102(e) and that Broom et al. cannot support an obviousness rejection because Broom et al. is nonanalogous art.

C. Broom et al. Does Not Qualify As Prior Art To Support A Rejection Of Claim 15 Under 35 U.S.C. 102(e)

Claim 15, the broadest of the composition claims, stands or falls alone because Claim 15 recites no amount of solvent and Claim 15 is the only pending claim that stands rejected under 35 U.S.C. 102(e) as allegedly being anticipated by Broom et al.¹

The rejection of Claim 15 under 35 U.S.C. 102(e) should be overturned because Broom et al. does not qualify as prior art under relevant statutory framework. The relevant statutory framework is the pre-American Inventor's Protection Act version of 35 U.S.C. 102(e) because

¹ In previous correspondence with the Examiner, amendments to Claims 4, 7, 8, 9, and 13 that included a recitation of a solvent in an amount of 55% by weight of the total treatment material were sufficient to overcome anticipation rejections based on Broom et al. See *Amendment and Response to Office Action of June 6, 2003, Office Action of November 18, 2003, and February 27, 2003 Interview Summary dated March 4, 2003*

references based on international applications that were filed prior to November 29, 2000, such as Broom et al., are subject to the former version of 35 U.S.C. 102(e). See MPEP 2136. That version of 35 U.S.C. 102(e) reads:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Thus, if the reference is the child of an international application parent, the effective date of the reference is the date on which the applicants of the parent fulfilled requirements of paragraphs (1), (2), and (3) of 35 U.S.C. 371(c). See MPEP 2136. See also MPEP 706.02(a). Lending support to this interpretation of the statute, the MPEP explains that to determine the critical date of an international application that has an international filing date prior to November 29, 2000, apply the reference under 35 U.S.C. 102(e) as of the earlier of the date of completion of the requirements of 35 U.S.C. 371(c)(1), (2) and (4) or the filing date of the later filed U.S. application that claimed the benefit of the international application. And with respect to the parent of Broom et al., that date is April 28, 1995. (Attachment B to Appellants' Amendment and Remarks to the Office Action of June 6, 2003 filed on September 3, 2003 shows that application number 08/428,101 on which Broom et al. was based Broom et al. has a Section 371 date and a Section 102(e) date of April 28, 1995.)

Under the above framework, Broom et al. cannot anticipate Claim 15. Claim 15 recites matter that originated in the specification of U.S. App. No. 08/322,252 filed October 12, 1994 to which the instant application, a continuation in part, claims priority. See Attachment A to

Appellants' Amendment and Remarks to the Office Action of June 6, 2003 filed on September 3, 2003, which is the relevant portion of the 08/322,252 specification that supports Claim 15.

Since Broom et al. has a Section 371 date and a Section 102(e) date of April 28, 1995 – more than six months *after* the filing date of the parent of Broom et al. application (U.S. App. No. 08/322,252), Broom et al. cannot be applied as prior art to Claim 15. Accordingly, the Appellants' request that the rejection of Claim 15 under 35 U.S.C. 102(e) be overturned.

D. Broom et al. Is Nonanalogous Art

The Examiner has rejected Claims 4 – 15 under 35 U.S.C. 103(a) as being allegedly unpatentable over Broom et al. The Appellants' respectfully submit that Broom et al. is nonanalogous art and cannot be applied to Claims 4-15² to support a rejection under 35 U.S.C. 103(a). Appellants wish to point out, however, that the Appellants' nonanalogous art argument applies to each of Claims 4-15, and if the Board accepts said argument, the rejection of Claims 4-15 under 35 U.S.C. 103(a) based on Broom et al. should be overturned. But if the Board finds that Broom et al. is analogous art, then the Appellants' respectfully submit that the Claims do not stand or fall together since the claims recite separate patentable elements necessitating separate arguments as to why Broom et al. does not motivate the skilled artisan to achieve the invention recited in the separate claims with any reasonable expectation of success.

Turning to the nonanalogous art analysis, binding Federal Circuit case law provides the Examiner with the relevant test for determining whether a particular reference is appropriate and analogous. That test is to 1) determine whether the references is "within the field of the

² The Appellants further contend that Broom et al. cannot be applied under 35 U.S.C. 102(e) to support any obviousness rejection directed toward elements in the claims that are the same elements as those disclosed in Claim 15.

inventor's endeavor"; and 2) assuming the reference is outside that field, to determine whether the reference is "reasonably pertinent to the particular problem with which the inventor was involved." In re Deminski, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986); see also In re Clay, 966 F.2d 656, 23 USPQ2d 1058 (Fed. Cir. 1992). Notably, the Examiner did not engage in this required analysis during prosecution.

Applying the first prong of the Federal Circuit's test, Broom et al. is nonanalogous art since it is not within the field of the inventors' endeavor. The field of the endeavor of the inventor is recited in the specifications as:

a composition and method for removing coatings containing hazardous metals or organic material from the surface of metals and non-metals and, in particular, compositions for use with methods for removing such coatings and rendering the removal material a non-hazardous waste byproduct and minimizing the exposure of the waste byproduct to the environment.

Additionally, the claimed invention relates to the application of treatment materials to wastes that are to be disposed of with the hazardous coating intact. *See Specification, page 1*. Thus, the field of the Appellants' endeavor is removing and treating coatings that have hazardous compounds therein and minimizing the exposure of those hazardous compounds during removal of such coatings.³

In contrast, the field of Broom et al. is different. Broom et al. were clearly endeavoring in the field of pharmaceutical compositions and more specifically, chemical compounds that have β -lactamase inhibitory and antibacterial properties. Such fields are widely divergent from the field of the Appellants' endeavor. And as such, the first prong of the Federal Circuit's test in In re

³ The field of the inventors endeavor is decidedly directed toward the environmental remediation or ecological field of arts.

Deminski is satisfied. But again, the Examiner never engaged in this analysis, or at least never articulated any reasoning with respect to this required analysis.

With Broom et al. outside the field of the inventors' endeavor, the Federal Circuit directs the Examiner and the Board to the next inquiry, which is whether either reference is reasonably pertinent to the particular problem with which the inventors of claimed invention are involved. Appellants submit that Broom et al. is clearly not pertinent to the problem that the Appellants are involved. To elaborate, the object of the claimed invention is to allow for the stripping and safe disposal of coatings containing hazardous materials. Broom et al., in marked contrast, is not directed to this problem. Rather, Broom et al. is directed to problems that were quite different than those faced by the inventor of the present invention, for example, providing a compound useful in the "treatment of infections in animals, especially mammals, including humans, in particular humans and domesticated farm animals." *See Broom et al., Col. 10, Lines 1-13*. To be sure, these are not the types of problems that faced the inventor of the claimed invention.

In sum, the Appellants could not have been expected to look to Broom et al. for providing a teaching relevant to the *pertinent problems* that were before them. "A reference is reasonably *pertinent* if ... it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering the problem." Wang Labs., Inc. v. Toshiba Corp., 993 F.2d 858 (Fed. Cir. 1993). Because of the widely divergent aims of Appellants with that of the inventors of Broom et al., Appellants respectfully submit that Broom et al. would not have "commended itself to [the] [Appellants'] attention in considering the problem." Wang Labs, Inc., 933 F.2d 858. Accordingly, Broom et al. is nonanalogous art and cannot support a rejection under 35 U.S.C. 103(a).

E. Broom et al. Does Not Motivate The Skilled Artisan To Arrive At The Claimed Invention With Any Reasonable Expectation Of Success

In the event that the Board finds that Broom et al. is analogous art, Broom et al. does not support an obviousness rejection since Broom et al. does not motivate the skilled artisan to arrive at the claimed invention with any reasonable expectation of success.

With respect to Claims 4 and Claims 5 and 6 , which depend from Claim 4, these Claims do not stand or fall with the other claims in the group. This is because Claim 4 claims at least one of the alternatives recited in subsection (a) of Claim 4 in addition to the solvent selected from the recited compounds in subsection (b) of Claim 4 in an amount up to 55% by total weight of the treatment material.

Broom et al. cannot support a rejection of Claims 4-6 under 35 U.S.C. 103(a) because Broom et al. does motivate this skilled artisan to 1) selected any of the recited solvents; and 2) select any amount of solvent.

The Examiner alleges that it would have been obvious at the time the invention was made to use the specific percentage of solvent since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involve only routine skill in the art.

The Appellants submit that the Examiner's argument fails for two reasons. First, the Examiner's argument is based on the faulty premise that the general conditions of the claim are disclosed in Broom et al. Indeed, the general conditions of Claims 4-6 are not disclosed in Broom et al. because Broom et al. does not disclose solvent. Therefore, the skilled artisan would not be motivated to find a workable or optimum range of solvent. In other words, an optimum range of *something* cannot be found when that *something* does not exist in the reference.

Therefore, Broom et al. does not motivate the skilled artisan (who also would not look to Broom et al. since Broom et al. is nonanalogous art as argued above) to arrive at that which is claimed in Claims 4-6 with any reasonable expectation of success. Accordingly, the rejection of Claims 4-6 is overcome and reversal thereof is respectfully requested.

Claim 7 is drawn to a material for admixture with a paint stripper and requires different elements than all the other claims in that at least one compound is selected from the recited compounds of (a), (b), and (c) of that claim, plus possible solvents in a particular amount as recited in subsection (d) of Claim 7. Therefore, Claim 7 does not stand or fall with the other claims.

However, the argument is essentially the same as with respect to Claims 4-6. That is, Broom et al. does not motivate the skilled artisan to arrive at the claimed combination of compounds along with the recited possible solvents in the recited amount. Broom et al. merely provides a laundry list of chemicals. And Broom et al. provides no motivation to combine the chemicals with the recited solvent in the required amount with any reasonable expectation of success. Notably, the Examiner cannot point to any such teaching, suggestion or motivation in Broom et al. as is required of the Examiner. See *Brown S. Williams Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25 (Fed. Cir. 2000) (a showing of a suggestion, teaching, or motivation in the reference is an essential component of an obviousness holding). Moreover, the Examiner must clearly explain the reasons one of ordinary skill in the art would be motivated by Broom et al. to arrive at the claimed invention. *In re Rouffet*, 149 F.3d 1350, 1359 (Fed. Cir. 1998). Accordingly, the rejection of Claim 7 fails and reversal thereof is respectfully requested.

Claim 8 is drawn to a treatment material for use with an encapsulant or overcoating and requires different elements than the other claims in that at least one compound is selected from the recited compounds listed in (a) and (b) of that claim in addition to solvents in an amount, which is recited in subsection (c) of Claim 8. Therefore, Claim 8 does not stand or fall with the other claims in the group. But the argument as to why Broom et al. does not motivate the skilled artisan to arrive at the claimed invention is essentially the same as above. Again, Broom et al. only recite a laundry list of chemicals and not motivation. Accordingly, the rejection of Claim 8 should be reversed.

Similarly, Claim 9 does not stand or fall with the other claims in the group of Claims 4-15. Claim 9 is drawn to a treatment material for use with an abrasive in removing coatings, said coatings having a hazardous metal or compound contained therein and comprising different compounds from previous claims selected from (a) and (b) of that claim, while subsection (c) of that claim recites solvents and an amount of solvent. But again, the arguments are the same as above because Broom et al.'s laundry list is insufficient to motivate the skilled artisan to arrive at the claimed invention. Accordingly, the rejection of Claim 9 should be reversed.

Claims 10-12 are the only method claims out of Claims 4-15 and as such do not stand or fall with the other claims in the group. But the arguments are similar to those present above. Further, method claims 10-12 recite method steps, i.e., applying a treatment compound to said coating and removing said coating and treatment compound, applying the material as a layer on a coating, applying the compound by ejection onto said surface, that are nowhere to be found in Broom et al. Therefore, it is difficult to understand how the Examiner believes that Broom et al.

motivates the skilled artisan to arrive at the claimed method steps. Accordingly, the rejection of claims 10-12 cannot be sustained.

Claim 13 is drawn to a treatment material comprising magnesium oxide and calcium phosphate, said magnesium oxide and calcium phosphate mixed in an alkyd, epoxy, acrylic, elastomeric, or urethane paint system and a solvent along with an amount of solvent. While the argumentation is the same as the argumentation presented above, Claim 13 recites an additional element that is not taught or remotely suggest by Broom et al. That is, Claim 13 recites that the treatment material is to be mixed in an alkyd, epoxy, acrylic, elastomeric, or urethane paint system. Just as Broom et al. does not teach solvent in any amount, Broom et al. does not even remotely suggest mixing the recited treatment material in an alkyd, epoxy, acrylic, elastomeric, or urethane paint system. Accordingly, the rejection of Claim 13 is overcome and reversal there of is requested.

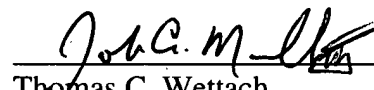
Claim 14 is similar to Claim 4, however, it recite different alternatives for compounds that comprise the claimed treatment material and claim recites solvent in the claimed amount. Therefore, Claim 14 does not stand on fall with the other claims. Note, however, that the argumentation is essentially the same as that presented for each of the claims above. That is, Broom et al. does not suggest the claimed possible compounds of claim 14 in addition to a solvent. Further, the addition of a solvent in the recited amount is not simply an "obvious design expedient" as the Examiner contends. The Examiner's reasoning in that regard would make sense only if Broom et al. taught the combination of the claimed compound with the possible solvents in the first place. It does not. And as such, the rejection of claim 14 should be reversed.

In conclusion, the rejection of Claims 4-15 in view of Broom et al. should be reversed because Broom et al. does not qualify as prior art under 35 U.S.C. 102(e) and/or Broom et al. is nonanalogous art and/or Broom et al. does not motivate the skilled artisan to arrive at the claimed invention with any reasonable expectation of success.

Respectfully submitted,

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IX. Appendix A

1. (withdrawn) A method for removing a coating on a surface comprising ejecting an abrasive admixed with a treatment material comprising at least one compound selected from the group consisting of calcium, sodium or potassium silicate, portland cement type I to IV, and sodium and potassium calcium phosphate and iron or aluminum sulfate.

2. (withdrawn) A method for removing a coating as set forth in Claim 1 wherein said treatment material is portland cement and potassium phosphate or Calcium Phosphate.

3. (cancelled)

4. (previously presented) A treatment material for use in a method for removing a coating, said coating having a hazardous metal or compound contained therein, said treatment material comprising:

- a. at least one of:
 - i. an alkali metal silicate or alkaline earth metal silicate or portland cement,
 - ii. an alkali metal or alkaline earth metal phosphate,
 - iii. an oxide or hydroxide of a magnesium, aluminum, iron, potassium or sodium; or
 - iv. combinations thereof, wherein said combinations are present in a ratio ranging from 10:0:0 to 0:1:1 respectively; and
- b. a solvent in an amount up to about 55% by total weight of the treatment material, wherein said solvent is selected from water, aliphatic hydrocarbons, aromatic hydrocarbons, alcohols, esters, glycol ethers, ketones, chlorinated solvents and glycols.

5. (previously presented) A treatment material as set forth in Claim 4 wherein said ratio of part a are between 10:1:0.2 to 7:1:0.5.

6. (original) A treatment material as set forth in Claim 4 including a resin and surfactant compatible with the solvent.

7. (previously presented) A treatment material for admixture with a paint stripper comprising:

- a) at least one of an alkali metal silicate, an alkaline earth metal silicate, or portland cement;
- b) at least one of an alkali metal oxide, an alkali metal hydroxide, an alkaline earth metal oxide, or an alkaline earth metal hydroxide;
- c) an alkali metal phosphate; and

d) a solvent in an amount up to about 55% by total weight of the treatment material, wherein said solvent is selected from the group consisting of water, aliphatic hydrocarbons, aromatic hydrocarbons, alcohols, esters, glycol ethers, ketones, chlorinated solvents and glycols.

8. (previously presented) A treatment material for use with an encapsulant or overcoating comprising:

a) an alkali metal or alkaline earth metal silicate oxide or hydroxide or portland cement;

b) an alkali metal or alkaline earth metal phosphate; and

c) a solvent in an amount up to about 55% by total weight of the treatment material, wherein said solvent is selected from the group consisting of water, aliphatic hydrocarbons, aromatic hydrocarbons, alcohols, esters, glycol ethers, ketones, chlorinated solvents and glycols.

9. (previously presented) A treatment material for use with an abrasive in removing coatings, said coatings having a hazardous metal or compound contained therein, said treatment material comprising:

a. at least one of an alkali metal silicate, an alkaline earth metal silicate, or a portland cement of types I to V;

b. at least one of sodium, calcium phosphate, potassium phosphate, calcium silicate, iron sulfate, or aluminum sulfate; and

c. a solvent in an amount up to about 55% by total weight of the treatment material, wherein said solvent is selected from the group consisting of water, aliphatic hydrocarbons, aromatic hydrocarbons, alcohols, esters, glycol ethers, ketones, chlorinated solvents and glycols.

10. (previously presented) A method for removing from a surface a coating having a hazardous metal comprising applying a treatment compound as set forth in Claims 4 or 14 to said coating and removing said coating and treatment compound.

11. (original) The method as set forth in Claim 10 wherein said treatment compound includes a solvent and is applied as a layer on said coating.

12. (original) The method as set forth in Claim 10 wherein said treatment compound is applied by ejection onto said surface.

13. (previously presented) A treatment material comprising:
- a) magnesium oxide and calcium phosphate, said magnesium oxide and calcium phosphate mixed in an alkyd, epoxy, acrylic, elastomeric or urethane paint system; and
 - b) a solvent in an amount up to about 55% by total weight of the treatment material, wherein said solvent is selected from the group consisting of water, aliphatic hydrocarbons, aromatic hydrocarbons, alcohols, esters, glycol ethers, ketones, chlorinated solvents and glycols.
14. (previously presented) A treatment material for use in a method for removing a coating, said coating having a hazardous metal or compound contained therein, said treatment material comprising:
- a) a compound selected from the group consisting of Sodium Silicate, Diammonium Phosphate, Sodium Metasilicate, Dicalcium Phosphate, Sodium Orthosilicate, Dipotassium Phosphate, Potassium Silicate, Tricalcium Phosphate, Aluminum Sulfate, Trisodium Phosphate, Alum, Sodium Metabisulfite, Ferrous Sulfate, Metallic Iron, Ferric Sulfate, Silicate of Soda, Tricalcium Silicate, Soda Ash (Sodium Carbonate), Dicalcium Silicate, Caustic Potash (Potassium), Tricalcium Aluminate, Hydroxide, Calcium Carbonate, Calcium Phosphate, Phosphoric Acid, Polythio Carbonate, and combinations thereof; and
 - b) a solvent in an amount up to about 55% by total weight of the treatment material, wherein said solvent is selected from the group consisting of water, aliphatic hydrocarbons, aromatic hydrocarbons, alcohols, esters, glycol ethers, ketones, chlorinated solvents and glycols.
15. (previously added) A treatment material for use in a method for removing a coating, said coating having a hazardous metal or compound contained therein, said treatment material comprising a compound selected from the group consisting of Sodium Silicate, Diammonium Phosphate, Sodium Metasilicate, Dicalcium Phosphate, Sodium Orthosilicate, Dipotassium Phosphate, Potassium Silicate, Tricalcium Phosphate, Aluminum Sulfate, Trisodium Phosphate, Alum, Sodium Metabisulfite, Ferrous Sulfate, Metallic Iron, Ferric Sulfate, Silicate of Soda, Tricalcium Silicate, Soda Ash (Sodium Carbonate), Dicalcium Silicate, Caustic Potash (Potassium), Tricalcium Aluminate, Hydroxide, Calcium Carbonate, Calcium Phosphate, Phosphoric Acid, Polythio Carbonate, and combinations thereof.